Flooding

Objective: To wash oil stranded on land to the water's edge for collection.

Description: A perforated header pipe or hose is placed above the oiled shore or bank. Ambient-temper-

ature water is pumped through the header pipe at low pressure and flows downslope to the water where any oil released is trapped by booms and recovered by skimmers or other suitable equipment. On porous sediments, water flows through the substrate, pushing loose oil ahead of it. On saturated, fine-grained sediments, the technique becomes more of a

surface flushing.

Applicable Habitat Types: All shoreline types where the equipment can be effectively deployed. Not effective in steep

intertidal areas.

When to Use: In heavily oiled areas when the oil is still fluid and adheres loosely to the substrate, and

where oil has penetrated into gravel sediments. This method is frequently used with other

washing techniques (low- or high-pressure, cold- to hot-water flushing).

Biological Constraints: Special care should be taken to recover oil where nearshore habitats contain rich biological

communities. Not appropriate for muddy substrates.

Environmental Effects: Habitat may be physically disturbed by foot traffic during operations and smothered by

sediments washed down the slope. If containment methods are not sufficient, oil and oiled sediments may be flushed into adjacent areas. Flooding may cause sediment loss and erosion of the shoreline and shallow rooted vegetation. Oiled sediment may be transported

to nearshore areas, contaminating them and burying benthic organisms.

Waste Generation: Depends on the effectiveness of the collection method.